



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS

| 5. | COMMISSIONER FOR PATENTS |
|----|---------------------------------|
| | P.O. Box 1450 |
| | Alexandria, Virginia 22313-1450 |
| | memory member 4001 : |

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|--|----------------------|-------------------------|------------------|
| 09/443,779 | 11/19/1999 | SU CHIN CHANG | 13237-2495 | 7712 |
| 75 | 590 06/27/2003 | | | |
| JOSEPH R. K | | | EXAMINER | |
| | AVENUE SOUTH | | EDOUARD, PAT | RICK NESTOR |
| | ANL CENTRE, SUITE 16 S, MN 55402-3319 | 00 | ART UNIT | PAPER NUMBER |
| WIII VI OEI | 5, 1411 35 102 33 17 | | 2654 | 5 |
| | • | | DATE MAILED: 06/27/2003 | 5 |

Please find below and/or attached an Office communication concerning this application or proceeding.



Office Action Summary

Application No. 09/443,779

Applicant(s)

CHANG

Examiner

Patrick N.Edouard

Art Unit **2654**



| The MAILING DATE of this communication appears | on the cover sheet with the correspondence address | | | | | |
|---|---|--|--|--|--|--|
| Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. | | | | | | |
| - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. | | | | | | |
| · If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. | | | | | | |
| If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). | | | | | | |
| Any reply received by the Office later than three months after the mailing date of tearned patent term adjustment. See 37 CFR 1.704(b). | his communication, even if timely filed, may reduce any | | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on | · | | | | | |
| 2a) ☐ This action is FINAL . 2b) ☑ This act | ion is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4) 💢 Claim(s) <u>1-31</u> | is/are pending in the application. | | | | | |
| 4a) Of the above, claim(s) | is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) | is/are allowed. | | | | | |
| 6) 💢 Claim(s) <u>1-31</u> | is/are rejected. | | | | | |
| 7) Claim(s) | is/are objected to. | | | | | |
| 8) Claims | are subject to restriction and/or election requirement. | | | | | |
| Application Papers | | | | | | |
| 9) \square The specification is objected to by the Examiner. | | | | | | |
| 10) ☐ The drawing(s) filed on is/are a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the d | rawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| 11) The proposed drawing correction filed on | is: a) \square approved b) \square disapproved by the Examiner. | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13) ☐ Acknowledgement is made of a claim for foreign p | riority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | |
| a) All b) Some* c) None of: | | | | | | |
| 1. Certified copies of the priority documents hav | e been received. | | | | | |
| 2. Certified copies of the priority documents hav | e been received in Application No | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| *See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). | | | | | | |
| a) U The translation of the foreign language provisional application has been received. | | | | | | |
| 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s) | | | | | | |
| 2) X Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152) | | | | | | |
| 3) X Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 6) Other: | | | | | | |
| | | | | | | |

Application/Control Number: 09/443,779 Page 2

Art Unit: 2654

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Loatman et al (4,914,590)..

As per claims 1, 7, 8, Loatman et al teach a method for analyzing and debugging natural language parses, comprising (figures 8A-16B):

"Displaying a parse tree for a sentence comprising at least one connecting point having two children" (figure 8a, col. 36, lines 21-55, the complex sentence "Reagan warned... the strait" is parsed and the parse tree shown in figure 8a);

"Receiving control input selecting one of said connecting points as a selected connecting point" (col. 36, line 56 to col. 37, line 25, a graphic debugging tool that is displayed allows the user to interact with the output of the parse and to select a node (connecting point) of the parse tree); col. 17, line 1 to col. 22, line 56, his system browser);

"Determining whether a constituent was formed at said connecting point" (col. 37, lines 7-25, the leaf nodes represent the individual words of input which have been morphologically analyzed);

Application/Control Number: 09/443,779 Page 3

Art Unit: 2654

"in response to determining that a constituent was formed at said selected connecting, displaying a plurality of menu items proximate to said selected connecting point" (col. 37, lines 14-25, the user has bugged the node which hold the parse of the clause and a menu of that clause is displayed).

As per claim 2, Loatman et al teach "receiving control input one of said plurality of menu..." (figures 10a-10b, the user interact with three window,;col. 37, lines 30-54, col. 17, line 1 to col. 22, line 56, his system browser in particular section 2-4.1.3, col. 21, line 37-48 that recites pressing the right button, bring s a menu of graph editing options where a link / node can be deleted).

"In response to receiving said control input for deleting said constituent, deleting said constituent" (col. 21, lines 35-47, a node is deleted accordingly).

As per claim 3, Loatman et al teach receiving control input for selecting one of said plurality..for deleting said parse tree"; (col. 22, lines 48-57, the DeleteLink Fn prompts for the From and To nodes from which to delete the link and the graph (parse tree);

"In response...deleting constituent formed at each connecting point in said parse tree" (col. 22, lines 48-59).

As per claim 4, Loatman et al teach "receiving control input selecting ..displaying information regarding said children of said selected connecting point" (figures 43A through 43D, col. 31, line 64 to col. 32, line 50, particularly col. 32, line 18-24);

Application/Control Number: 09/443,779

Art Unit: 2654

"Displaying information regarding said children of said selected connecting point" (figures 43A through 43D, col. 31, line 64 to col. 32, line 50, particularly col. 32, line 18-24, his system browser can display all the parse showing the links (nodes) of parent and children);

As per claim 5, Loatman et al teach displaying a first plurality of menu...identifying a grammar rule applied at said selected point to form constituent" (col. 38, line 35 to col. 40, line 2 his grammar development example).

As per claim 6, Loatman et al further teach wherein said control input selecting one of said connecting points as a selected connecting point comprises:

"Receiving input from an input placing a pointer of a user interface proximate to one of said connecting point" (col. 17, lines 1-50, the user selects any displayed node to be operated on with a browser windows that acts as menus); and

"receiving input representing an enabled state for the control of the input device" (col. 17, lines 1-40);

As per claim 9, Loatman et al teach determining whether a constituent was formed at said selected connecting point comprises determining whether a rule was successfully applied at said selected connecting ..." (Col. 37, line 65 to col. 38, , line 20).

Claim 10 recites the limitations of claim 1 (see rejection of claim 1 above), and further recites in response to determining that a constituent was not successfully formed at said selecting node, displaying a first plurality of menu items proximate to said connecting point (col. 7, lines 45-62, figures 43c and 43D, col. 32, lines 32-50).

Application/Control Number: 09/443,779 Page 5

Art Unit: 2654

As per claim 11, Loatman et al teach receiving control selecting one of said plurality of menu items (col. 17, line 1 to col. 22, line 57, his system browser wherein when a node is selected, menus are displayed relate to examining and modifying things, provide database search and edit the window's graph);

"in response to receiving user input...displaying a second plurality of menus item proximate to said plurality of menu items "(col. 17, lines 52-61, a menu of the object slot is displayed, then when a slot is selected a menu of its facets will pop up).

As per claims 12-16, Loatman et al teach receiving control input selecting one of said second plurality of menu items (col. 17, lines 52-61); and

"displaying a first group of rules comprising all of the rules that may be applied at said selected connecting point of said constituents of said connecting point" (col. 22, lines 60 to col. 22, line 21).

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Application/Control Number: 09/443,779

Art Unit: 2654

4. Claims 17-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loatman et

al (4,914,590).

It is noted that Loatman et al teach the claimed invention but does not explicitly teach in

response to receiving user input selecting said menu item for displaying rules unsuccessfully

applied at said selected connecting point, displaying a list of rules that were unsuccessfully applied

at said selected connecting point. However, since Loatman et al teach to display the rules that are

successfully applied at a connecting node at col. 37, line 30 to col. 40, line 42, it would have been

obvious to one of ordinary skill in the art to recognize by simply incorporate into Loatman's menu

the unsuccessful rules, the system would be able to display also via a menu the unsuccessful rules

that would render the system more versatile capable of displaying many different type of rule.

5. Claims 24-31 are the same in scope and content as claims 1-23 above and therefore are

rejected under the same rationale.

6. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231 or faxed to:

(703) 308-9051, (for formal communications intended for entry) Or:

(703) 305-9508 (for informal or draft communications, please label "PROPOSED" or

"DRAFT")

Page 6

Page 7 Application/Control Number: 09/443,779

Art Unit: 2654

Hand-delivered responses should be brought to Crystal Park 11, 2121 Crystal Drive, Arlington.

VA., Sixth Floor (Receptionist).

6. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Patrick N. Edouard whose telephone number is (703) 308-6725. The

examiner can normally be reached on Tuesday-Friday from 07:30 a.m.-6:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Marsha Banks-Harold, can be reached on (703) 305-4379.

The facsimile phone number for this Art Unit is (703) 305-9508. Alternatively, facsimile messages

may be sent directly to (703) 305-9644 where they will be stored in the examiner's voice mailbox

(telling the examiner that a fax was received) and be automatically printed (i.e. - no delay by the

examiner).

Any inquiry of a general nature or relating to the status of this application should be

directed to the Group receptionist whose telephone number is (703) 305-3900.

Patrick N. Edouard

June 14, 2003